COGENT
Coconut genetic resources for enhanced livelihoods

www.cogentnetwork.org

COGENT

Bioversity International

COGENT

International Coconut Genetic Resources Network

Alexia PRADES, COGENT coordinator

Who are we?

COGENT

A Network of Countries

- **39 country members, coconut producing countries (2 Cogent representatives/country)** = 98% of the total production in the world
- **24 national genebanks**
- **5 International Coconut Genebanks (ICG)**

Sub-Networks

- Southeast and East Asia (SEA)

  China, Indonesia, Malaysia, Myanmar, Philippines, Thailand and Vietnam

- South Asia and Middle East (SAME)

  Bangladesh, India, Pakistan, Sultanate of Oman and Sri Lanka

- South Pacific (SP)

  Cook Islands, Fiji, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu

- Africa and Indian Ocean (AIO)

  Benin, Côte d'Ivoire, Ghana, Kenya, Madagascar, Mozambique, Nigeria, Seychelles and Tanzania

- Latin America and the Carribeans (LAC)

  Brazil, Colombia, Costa Rica, Cuba, Guyana, Haïti, Honduras, Jamaica, Mexico and Trinitdad & Tobago

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Coconut producing countries and genebank location

History

Creation in 1992: the CGIAR *(Consortium of international research centers)* decided to include coconut in its research portfolio. COGENT will stand under the supervision of Bioversity International.

Year	COGENT Coordinators
1993	Mr. G. Santos and Dr. M. de Nucé de Lamothe
1994-2005	Dr. Ponciano A. Batugal
2005-2009	Dr. Maria Luz George
2009-2011	Dr. Stephan Weise
2011-2014	Dr. Roland Bourdeix
2014	Dr. Alexia Prades

What do we do?

Our goal

To develop and implement an international mechanism to coordinate research activities of global significance particularly in germplasm exploration, collecting, conservation and enhancement

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Our main activities

- Encourage the protection and use of existing germplasm collections
- Identify and secure threatened diversity
- Promote greater collaboration among research groups
- Conduct appropriate training, disseminate information and secure necessary funding for network activities
- Establish and maintain an international database on existing and future collections

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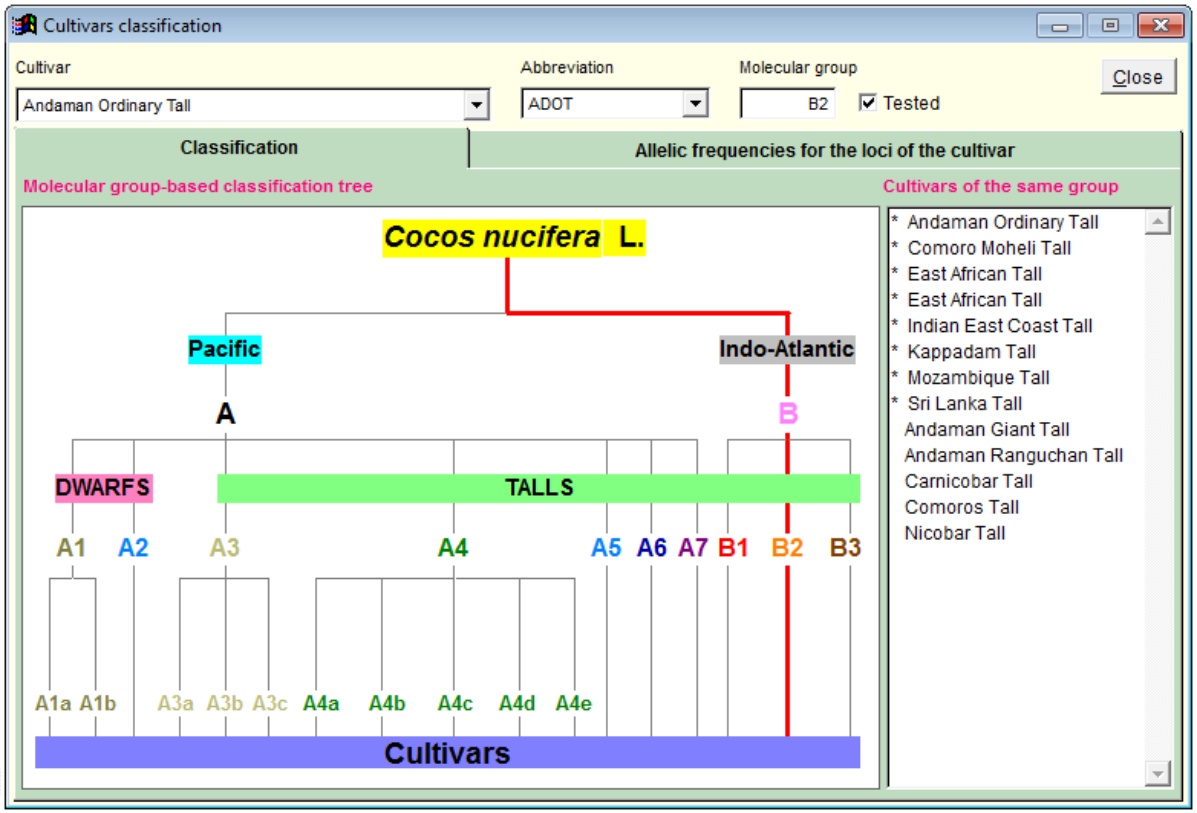
Genebank database

- **CGRD** developed by CIRAD for COGENT



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LA RECHERCHE AGRONOMIQUE POUR LE DÉVELOPPEMENT

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Examples of past and on going projects

- Regeneration of accessions in the International Coconut Genebank for Africa and the Indian Ocean
- Establishment of the International Coconut Genebank for South America and the Caribbean
- Validation of a coconut embryo culture protocol for the international exchange of germplasm
- Development of cryopreservation protocols for cryobanking of coconut embryo (South Korea)
- Safeguard of the PNG collection threatened by LYTS

What's next?

COGENT

Global Strategy for better conservation and use of the coconut genetic resources

Published in 2015

COGENT gives the opportunity to
build international projects on CGR
in the most efficient way, and is the only way to get a global appraisal of coconut conservation and preserve it for the future generations

The Global Strategy for better conservation and use of coconut genetic resources

1. **Reinforce COGENT** as a sustainable, powerful and effective platform for the collaborative conception, coordination and implementation of priority projects

2. Strengthen **local, national and international commitment** to identify, collect, conserve, document and better use coconut genetic resources.

3. Revisit and **optimize the present organization of the COGENT coconut collections** in close collaboration with other partners

4. **Develop the mechanisms and procedures, skills, knowledge, capacity, laboratories** and other resources required for safe and well-facilitated international germplasm movements

5. Identify **critical genetic and geographical gaps** in existing *ex situ* collections, prioritize and build up missions aiming both to collect germplasm, boost *in situ* and *ex situ* local conservation and strengthen their interface

The Global Strategy for better conservation and use of coconut genetic resources

6. Develop and improve national and global **coconut germplasm databases** and sharing of technical information regarding germplasm and planting material

7. **Secure** the conservation of existing *ex situ* coconut genetic resources and their distribution

8. Prepare the field of **coconut genomics** which will become a crucial tool for conservation and use of coconut genetic resources

9. **Strengthen the use** of coconut genetic resources by enhancing germplasm characterization and evaluation, dissemination of breeding results and marketing of improved varieties

10. Promote and strengthen ***in situ* conservation** of landraces and dissemination by local stakeholders of good planting material in a sustainable and equitable manner. This will integrate a gender approach.

Some of our partners

Bioversity International

CGIAR

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AGRICULTURAL RESEARCH FOR DEVELOPMENT

Asian and Pacific Coconut Community

UMR QualiSud

Coconut Research Institute of Sri Lanka

GLOBAL CROP DIVERSITY TRUST
A FOUNDATION FOR FOOD SECURITY

ACIAR

RDA
RURAL DEVELOPMENT ADMINISTRATION

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